ENHANCEMENT OF UNDERFILL PHYSICAL PROPERTIES BY THE ADDITION OF A THERMOTROPIC CELLULOSE

Abstract of the Disclosure

An electrical component having improved impact resistance and improved tolerance for thermal cycling, without sacrificing high-temperature performance, and without requiring unconventional and expensive manufacturing techniques includes an electric device mounted on a substrate circuit board, and a composite material underfilling, overmolding or encapsulating the electronic device, wherein the composite material includes a thermoset matrix phase and a discontinuous liquid crystal polymer phase dispersed throughout the thermoset matrix phase.